



UNITED STATES PATENT AND TRADEMARK OFFICE

and
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,551	05/13/2002	Michael Lumm	32860-000263/US	8693
30596	7590	12/01/2003	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			WALSH, BRIAN D	
P.O.BOX 8910				
RESTON, VA 20195			ART UNIT	PAPER NUMBER
			3722	
DATE MAILED: 12/01/2003				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/019,551	LUMM ET AL.
	Examiner	Art Unit
	Brian D. Walsh	3722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 21 December 2001.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 13 May 2002 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: please correct "devise," which appears to be misspelled in the substitute specification, page 1, paragraph 2, line 2. All such errors should be corrected.
2. On page 5, paragraph 22, lines 3 – 5, the specification states: "The pinion 11 is itself **driven by an internally an externally toothed gear ring 12...**" All such grammatical errors should be corrected.
3. The specification refers to the claims, page 2, paragraph 8, line 2 as well as in the last line of paragraph 26.
Appropriate correction is required.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the various embodiments of the coupling between the main motor and the *housing* of the support motor must be shown or the feature(s) canceled from the claim(s). Similarly, the various embodiments regarding external, internal, as well as the externally and internally toothed gear rings must be shown. Since Applicant has failed to provide drawings that accurately disclose all embodiments of the transmission system and since the specification includes errors (see item #2 above) that make the embodiments of the transmission system unclear, Applicant must be careful **not to include any new matter** in the drawings.

The “windings” of the slip ring set in claim 8 must also be shown or canceled from the claims.

No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 1 – 20 are objected to because of the following informalities: The claims repeatedly refer to a “support motor,” however, the specification refers to (13) primarily as “rest motor.” The Examiner assumed these terms were intended by Applicant to be one and the same. Terminology should be consistent between the specification and the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of 37 CFR 1.71(a)-(c):

(a) The specification must include a written description of the invention or discovery and of the manner and process of making and using the same, and is required to be in such full, clear, concise, and exact terms as to enable any person skilled in the art or science to which the invention or discovery appertains, or with which it is most nearly connected, to make and use the same.

(b) The specification must set forth the precise invention for which a patent is solicited, in such manner as to distinguish it from other inventions and from what is old. It must describe completely a specific embodiment of the process, machine, manufacture, composition of matter or improvement invented, and must explain the mode of operation or principle whenever applicable. The best mode contemplated by the inventor of carrying out his invention must be set forth.

(c) In the case of an improvement, the specification must particularly point out the part or parts of the process, machine, manufacture, or composition of matter to which the improvement relates, and the description should be confined to the specific improvement and to such parts as necessarily cooperate with it or as may be necessary to a complete understanding or description of it.

7. The specification is objected to under 37 CFR 1.71 because, in combination with a lack of sufficient drawings, it is not written in such a way that one of ordinary skill in the art could make and use the invention based on the written description. Grammatical error results in the description of the invention being functionally unclear. Resulting from the grammatical error noted in item #2 above, it is not clear if Applicant is claiming the pinion is driven by an internally OR AN externally toothed gear, or possibly, if Applicant intended to state the gear is toothed internally AND externally (Emphasis by Examiner). It is unclear is Applicant neglected to include the word "or" in this phrase or perhaps if Applicant misspelled the word "AND."

In dealing with transmission systems such elements are crucial. This lack of clarity is further compounded by the lack of sufficient drawings, as is described above. An additional example of the failure of the specification to clearly describe the invention involves the toothed gear ring (12) and frame support (3). Again in paragraph 22 (lines 2 – 3), Applicant states that the gear ring (12) is mounted rotatably on frame support (3). There are only two drawings and neither show gear ring (12) in the vicinity of frame support (3). It appears gear ring (12) is nested in pinion (17) on the opposite side of the tool rest and pinion (7). It is because of discrepancies such as these that the Examiner has determined the specification fails to comply with 37 CFR 1.71 (a)-(c).

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 1 – 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The rejections on 35 USC 112 first paragraph are based on the reasons set forth in the objection to the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1 – 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 includes language that fails to clearly disclose what Applicant intends as the claimed invention. Since the majority of claim 1 is recited in the preamble, the only positively claimed limitations are, "...synchronously driving the support motor, in rotation as a whole, by the main motor and with the aid of a mechanical coupling of the support and main." This single limitation in the claim is unclear. A motor is known to rotate so the further limitation "as a whole" is not understood by the Examiner. The preamble states the support motor is mounted at a fixed location so it is unclear how it could rotate as a whole.

Claim 1 also discloses this synchronous driving of the support motor by the main motor is with the aid of "a mechanical coupling of the support and main." Both "support" and "main" lack proper antecedent basis and, furthermore, are unclear. The

Examiner assumed Applicant intended to disclose the mechanical coupling (transmission) is coupled to the support motor and the main motor.

Regarding claim 3, Applicant has specified a “fixed support motor” wherein a housing of the support motor is mounted rotatably and capable of being driven synchronously in rotation with the main motor. It is unclear how a “fixed support motor” can be driven in rotation. The Examiner assumed, from information gleaned from the specification, that the support motor is in a “fixed location” (page 3, paragraph 15, line 1) and that this was the intended limitation in the claim.

Regarding claim 8, “windings” was not found in the specification. This element is unclear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1 and 2 are rejected, as best understood, under 35 U.S.C. 102(b) as being anticipated by Lupke et al.

Regarding claim 1, Lupke et al. discloses a method for carrying out an advancing movement of at least one tool support about a rotationally symmetric component wherein a tool is actuated via a leadscrew (41, 42). Lupke et al. discloses the tool is moved by the leadscrew (Col. 3, lines 24 – 35) via a transmission system (numerous elements, see cited paragraph). Lupke et al. further discloses the transmission system and collars are driven

synchronously by a support motor (31) and a main motor (30) with the aid of a mechanical coupling (29, 33 via 28a).

Regarding claim 2, Lupke et al. discloses a braking of the support motor in an event of zero feed (Col. 3, lines 31 – 35).

The Examiner notes in claim 1 that the recitation of the majority of the elements in claim 1 have not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Young (U.S. Pat. No. 2,739,234), Ricci (U.S. Pat. No. 5,189,933), Wachs et al. (U.S. Pat. No. 4,411,178) and Nodar (U.S. Pat. No. 5,894,772) all disclose apparatuses for machining rotationally symmetrical components, however, none disclose a rotatably mounted housing for a support motor mechanically coupled to a drive for a main motor.

Faxing of Responses to Office Actions (UPDATED)

12. In order to reduce pendency and avoid potential delays, TC 3700 is encouraging FAXing of responses to **ALL OFFICE ACTIONS** directly into the Group at **(703) 872-9306**. This practice may be used for filing papers not requiring a fee. It may also be used for filing papers which require a fee by applicants who authorize charges to a PTO deposit account. Please identify the Examiner and art unit at the top of your cover sheet. Papers submitted via FAX into TC 3700 will be promptly forwarded to the Examiner.

PLEASE NOTE: the fax number in the above paragraph has changed. It is to be used for all responses, including after-final communications.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Walsh whose telephone number is (703) 605-0638. The examiner can normally be reached on Monday - Friday 8:30 A.M. to 6:00 P.M., with every-other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on (703) 308-2159.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1148.



BDW

November 25, 2003


A. L. WELLINGTON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700